



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,383	11/04/2003	Jean-Francois Savouret	RICL-110 (69769-011)	5818
<div>35893 7590 07/20/2007 GREENBERG TRAUIG, LLP ONE INTERNATIONAL PLACE, 20th FL ATTN: PATENT ADMINISTRATOR BOSTON, MA 02110</div>				
			EXAMINER KEYS, ROSALYND ANN	
			ART UNIT 1621	PAPER NUMBER
			MAIL DATE 07/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/700,383

Applicant(s)

SAVOURET ET AL.

Examiner

Rosalynd Keys

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 11-32 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 14-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13 and 26-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 9 and 11-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 9 and 11-32 are pending.
Claims 11-13 and 26-32 are rejected.
Claims 9 and 14-25 are withdrawn from consideration.
Claims 1-8 and 10 are canceled.

Election/Restrictions

2. Claims 9 and 14-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 2, 2005.
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 11-13, 26-29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suga (US 5,530,030) in view of Silverman (The Organic Chemistry of Drug Design and Drug Action, 1992, pp. 15-19).

Suga teaches a compound and composition similar to the claimed compound having the formula I, wherein R3 and R5 are Cl, R4 is H, R3' is OH or OMe, and R4' and R5' are H (see Table 1, in particular compound 7 and its methoxy form; and column 3, lines 46 to column 4, line 10). The Examiner believes that the amounts disclosed in Table 3 are within the claimed dosage range. These compounds differ from the claimed compounds in that in the claimed compounds R3' is not OH or OMe. However, they can be F, Cl, or O-C₂-C₆ alkoxy.

Silverman teaches that biological properties of homologous compounds show regularities of increase and decrease (see page 16). Silverman also teaches that OH, F, and Cl

are classical isosteres ; that bioisosteres are substituents or groups that have chemical and physical similarities, and which produce broadly similar biological properties ; and that bioisosterism is a lead modification approach that has been shown to be useful to attenuate toxicity or to modify the activity of a lead (see page 19).

One having ordinary skill in the art at the time the invention was made would have been motivated to modify the compounds of Suga by either substituting OH with Cl or F; or by substituting OMe with a higher homolog, as taught by Silverman, with the expectation of obtaining a compound which has broadly similar biological properties with either modification of the compounds activity; or an increase or decrease in its potency or pharmacological effect.

8. Claims 11-13 and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 6,022,901) in view of Silverman (The Organic Chemistry of Drug Design and Drug Action, 1992, pp. 15-19), for the reasons given in the previous office action, mailed January 5, 2007.

Response to Amendment

Claim Rejections - 35 USC § 112

9. The rejection of claims 28-30 under 35 U.S.C. 112, second paragraph, is withdrawn.

Claim Rejections - 35 USC § 102

10. The rejection of claims 11-13, 26-29 and 32 under 35 U.S.C. 102(b) as being anticipated by Suga (US 5,530,030) is withdrawn.

Response to Arguments

Rejection of claims 11-13 and 26-32 under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 6,022,901) in view of Silverman (The Organic Chemistry of Drug Design and Drug Action, 1992, pp. 15-19)

11. Applicant's arguments filed April 23, 2007 have been fully considered but they are not persuasive.

The Applicants claims of unexpected results **have not been shown** with respect to the substitution of OH for Cl or F. Information regarding the diacetylation of morphine in heroine, salicylate acetylation into acetyl salicylic acid and the positioning of the CF₃ substituent in CF₃-dichloro derivatives of resveratrol are not sufficient to **show** that substitution of Cl or F for OH produces unexpected results.

For the above reasons this rejection is maintained.

Corrections

12. In the previous office action, claim 9 was inadvertently given the status of both rejected and withdrawn in the status of claims section of the office action and on the form PTOL-326. The correct status for claim 9 is withdrawn.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1621

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M, W & F 5:30-7:30 am & 1-5 pm; T & Th 5:30 am-4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eyley Yvonne can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rosalynd Keys/
Primary Examiner, Art Unit 1621

July 18, 2007